

**REMARKS**

As a result of the foregoing amendments, Claim 26 has been amended to include the limitation that the oligonucleotides are from 7 to 17 nucleotides long, Claim 29 has been amended to correct an error in grammar, and Claim 35 has been canceled. Entry of these amendments and reconsideration of pending and elected claims 26-34, 41-54 and 63 are respectfully requested.

No new matter has been entered as a result of this amendment. The limitation added to Claim 26, that the oligonucleotide is from 7 to 17 nucleotides in length, is supported throughout the specification and in Claim 1, as originally filed.

**Pending Claims Meet Requirements of 35 U.S.C. §112**

The rejection of Claim 35 for lack of enablement under 35 U.S.C. § 112 is moot in view of the cancellation of that claim in this amendment.

Reconsideration and withdrawal of the rejection of claims 28-34, 41-54 and 63 as being indefinite under 35 U.S.C. § 112, second paragraph, are respectfully requested. The claim terms identified in the rejection as being unclear are defined in the specification in such a way that one of skill in the art would understand the scope of the claim.

The rejection cites the term "another unit" in claim 28 as having undeterminable bounds. The specification teaches the meaning of this term and examples of other units at page 7, lines 17-29, thereby enabling one of skill in the art to establish the scope of the subject matter claimed.

The rejection also cites the phrase "a molecule which adapts the properties of the oligonucleotides to a specific requirement" in claim 28 as being indefinite. The specification teaches the meaning of this term and examples of such molecules at page 8, lines 15-31, thereby enabling one of skill in the art to establish the scope of the subject matter claimed.

The rejection of claim 29, citing the phrase "one or more modification" as being indefinite has been overcome by the amendment of that claim to correct the error in grammar and read "one or more modifications."

Claim 29 is further rejected by citing the phrase "suitable for synthesizing" as being indefinite. The specification teaches the meaning of this term and provides examples of "other units suitable for synthesizing" at page 7, lines 18-28, thereby enabling one of skill in the art to establish the scope of the subject matter claimed.

The inclusion of Claim 63 in this rejection under 35 U.S.C. §112 appears to be in error, since Claim 63 is not cited as containing any indefinite language and does not depend from any of the claims rejected as having indefinite language.

Pending Claims are Not Anticipated by Denner

Applicants respectfully request reconsideration and withdrawal of the rejection of claims 26-29, 32, 33, 41-44 and 63 under 35 U.S.C. §102(b) as being anticipated by Denner et al (WO 94/21664, hereinafter "Denner"). Newly amended claim 26 limits the claimed oligonucleotides to a length of 7 to 17 nucleotides. All of the nucleotides taught by Denner contain at least 18 nucleotides. In fact, Denner specifically teaches on pages 3, 4, 9 and 12 that only oligonucleotides of at least 18 nucleotides can be used as antisense molecules against the tenascin gene. Accordingly amended claim 26 is not anticipated by Denner. Claims 27-29, 32, 33 and 41-44 all depend from amended claim 26. Therefore, they also contain the limitation of 17 or fewer nucleotides in length and are not anticipated by Denner.

Claim 63 is not anticipated by Denner, because Denner fails to teach any of the sequences in the Markush Group of Claim 63. Each of SEQ ID Nos: 21 through 30 require a specific pattern of modification to their internucleoside bridges. See page 12 of the specification. Although Denner makes vague mention that some modification to the oligonucleotide backbone may be made, Denner utterly fails to teach these specific patterns where specific internucleoside bridges are modified and other specific internucleoside bridges are not modified.

Pending Claims are Not Obvious Over Denner in view of Baracchini and Friesen

Applicants respectfully request reconsideration and withdrawal of the rejection of claims 26-34, 41-44 and 63 under 35 U.S.C. §103(a) as being unpatentable over Denner in view of Baracchini et al and Friesen et al. As discussed above, Denner fails to teach the limitation of claims 26-34 and 41-44 that the oligonucleotide is of 17 or fewer nucleotides in length. In fact, Denner specifically teaches on pages 3, 4, 9 and 12 that an antisense oligonucleotide targeted against the same region of the tenascin gene as the instantly claimed oligonucleotides must be at least 18 nucleotides in length.

Although Baracchini et al and/or Friesen et al may teach antisense oligonucleotides to other targets that are 17 or fewer bases in length, neither of these generic references would motivate one of skill in the art, who knows the unpredictability of antisense oligonucleotide effectiveness, to disregard the teaching of Denner that antisense oligos targeted to this region of tenascin must be of at least 18 nucleotides in length. Accordingly, the combination of prior art cited by the rejection would not teach or suggest, to one of skill in the antisense arts, the oligonucleotides of instant claims 26-34 or 41-44.

The combined prior art also fails to teach or suggest all the limitations of instant Claim 63. As discussed above, Denner fails to teach the specific patterns of backbone modification to SEQ ID Nos: 21 through 30, as claimed in Claim 63. Nothing in either Baracchini et al and/or Friesen et al remedy this deficiency in Denner. Accordingly, the combination of prior art cited by the rejection does not teach or suggest, to one of skill in the art, all the limitations of Claim 63.

Applicants acknowledge the Examiner's statement that claims 45-54 are free of the prior art.

Applicants respectfully submit that the application is now in condition for allowance and request prompt notice thereof.

Respectfully submitted,



F. Aaron Dubberley, Reg. No. 41,001  
Attorney/Agent for Applicant

Aventis Pharmaceuticals Inc.  
Patent Department  
Route #202-206 / P.O. Box 6800  
Bridgewater, NJ 08807-0800  
Telephone (908) 231-3737  
Telefax (908) 231-2626

Aventis Docket No. DEAV1997/L238 US PCT